



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/629,114

07/29/2003

Harold Carrison

1001.1659101

6987

28075 7590 03/05/2009
CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER

MENDEZ, MANUEL A

ART UNIT

PAPER NUMBER

3763

MAIL DATE

DELIVERY MODE

03/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/629,114	Applicant(s) CARRISON ET AL.	
	Examiner Manuel A. Mendez	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 12-19, 21-24, 41-49 and 53-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-19, 21-24, 41-49, and 53-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

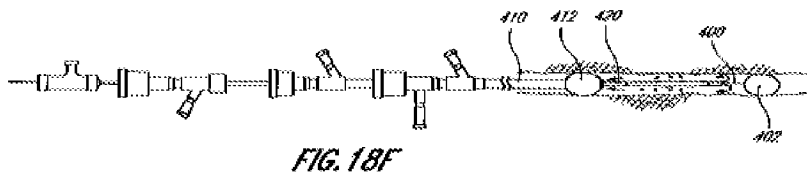
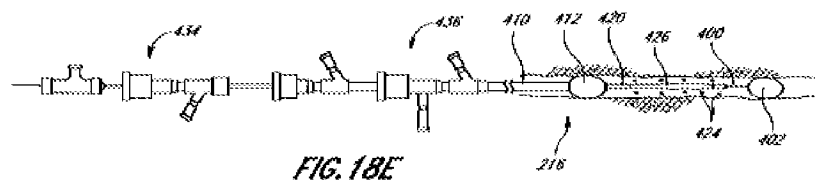
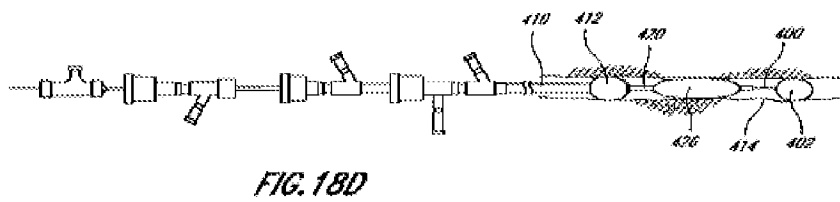
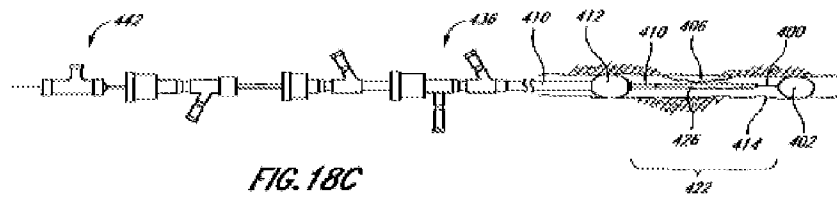
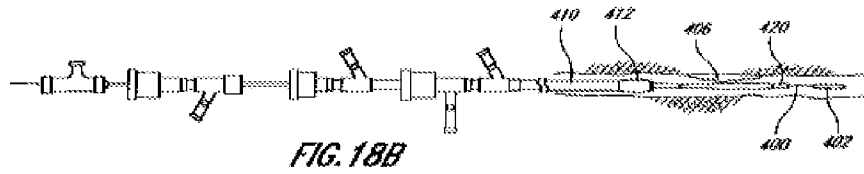
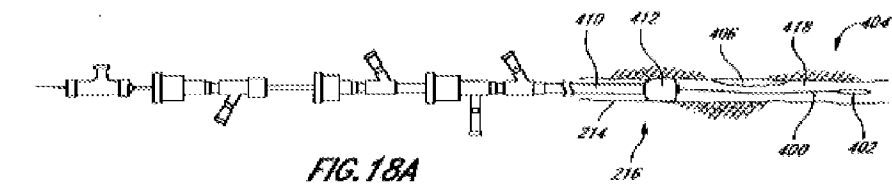
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

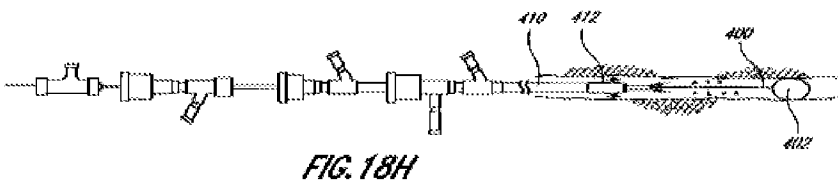
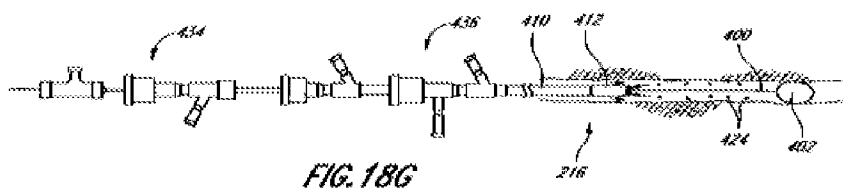
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Zadno-Azizi et al. (US 6,022,336; hereafter **Zadno-Azizi**).





The cited patent shows in the figures above, an apparatus having a first deployable structure and a second deployable structure, the first deployable structure disposed adjacent the treatment site and a second deployable structure disposed at a location proximal or distal the treatment site, the introduction of a treatment material into the vessel proximate the treatment site, deploying the second deployable structure within the vessel at a location proximal or distal the treatment site, and deploying the first deployable structure adjacent the treatment site to create movement of the treatment material adjacent the treatment site.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-8, 12-19, 21-24, 42-49, and 53-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Zadno-Azizi in view of Chien et al., [Tsugita et al. or Halevy], O'Connor, Jang, or Bradshaw, and in further view of Keith et al. or Kraus et al.**

Zadno-Azizi does not expressly disclose the infusion of a blood clot dissolving drug comprising of TPA, reteplase, or urikinase and (2) the use of alternative structures such as a filter assembly. However these particular enhancements would have been considered well known in the art as evidenced by the teachings of **Chien et al., Tsugita et al., Halevy, O'Connor, Jang, and Bradshaw.**

Chien et al. discloses the infusion of various blood clotting dissolving drugs such as TPA, reteplase, and urikinase. Concerning the alternative deployable structures, Tsugita et al. demonstrates the conventionality of using a filter or a basket as a second deployable structure. Halevy discloses a catheter having a brush, filament, and paddle assemblies. O'Connor discloses the use of a net or basket assembly in figure 4. Jang shows in figures 1 and 2, the use of a filter assembly in a balloon catheter. Bradshaw shows in figure 1, an impeller-shaped assembly for use in a catheter.

Based on the above observations, for a person of ordinary skill in the art, modifying the apparatus disclosed by Zadno-Azizi with the capability of infusing blood clotting dissolving drugs, as taught by Chien et al., would have been considered obvious in view of the conventionality of this particular type of drug,

Art Unit: 3763

and furthermore, because such drug usage would have enhanced the removal of stenosis from vessels in the body.

Concerning the different structures disclosed as alternatives to either the first deployable structure or the second deployable structure, for a person of ordinary skill in the art, modifying one of the inflatable balloons in the apparatus disclosed by Zadno-Azizi with any of the structures discussed above and taught by Tsugita et al., Halevy, O'Connor, Jang, and/or Bradshaw, would have been considered obvious in view of the conventionality of these particular enhancements, and furthermore, because the use of these alternative modifications would have enhanced the removal of stenosis from vessels in the body.

Finally, concerning (1) the use of a balloon catheter as an intra-cranial catheter and (2) the over-the-wire capability, both enhancements are conventional in the art as evidenced by the teachings of Keith et al. and Kraus et al. The Keith et al. patent demonstrates that catheters equipped with over-the-wire capabilities are conventional in the art and Kraus et al. demonstrates that it is conventional to use over-the-wire balloon catheters during intra-cranial applications. Accordingly, for a person of ordinary skill in the art, modifying the Zadno-Azizi apparatus for use in intra-cranial applications with an over-the-wire capability would have been considered obvious in view of the proven conventionality of these enhancements, and because such modifications would have been considered obvious design alternatives.

Art Unit: 3763

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel Mendez whose telephone number is 571-272-4962. The examiner can normally be reached on 0730-1800 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nicholas D. Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Manuel A. Mendez/

Primary Examiner, Art Unit 3763

Manuel Mendez
Primary Examiner
Art Unit 3763

MM

